

PF-0227-2 CIP

What is claimed is:

1. A purified human prostate-associated protease comprising the amino acid sequence of SEQ ID NO:1 or portions thereof.
2. A purified antibody which binds specifically to the protein of claim 1.
3. The antibody of claim 2, wherein the antibody is selected from an intact immunoglobulin molecule, a polyclonal antibody, a monoclonal antibody, a chimeric antibody, a recombinant antibody, a humanized antibody, single chain antibodies, a Fab fragment, an F(ab')₂ fragment, an Fv fragment; and an antibody-peptide fusion protein.
4. A method for preparing and purifying a polyclonal antibody with the specificity of the antibody of claim 2 comprising:
 - a) immunizing a animal with a protein of SEQ ID NO:1 under conditions to elicit an antibody response;
 - b) isolating animal antibodies;
 - c) attaching the protein to a substrate;
 - d) contacting the substrate with isolated antibodies under conditions to allow specific binding to the protein;
 - e) dissociating the antibodies from the protein, thereby obtaining purified polyclonal antibodies.
5. A polyclonal antibody produced by the method of claim 4.
6. A method for preparing a monoclonal antibody with the specificity of the antibody of claim 2 comprising:
 - a) immunizing a animal with a protein of SEQ ID NO:1 under conditions to elicit an antibody response;
 - b) isolating antibody-producing cells from the animal;
 - c) fusing the antibody-producing cells with immortalized cells in culture to form monoclonal antibody producing hybridoma cells;
 - d) culturing the hybridoma cells; and
 - e) isolating monoclonal antibodies from culture.
7. A monoclonal antibody produced by the method of claim 6.
8. A method for using an antibody to immunopurify a protein comprising:
 - a) attaching an antibody of claim 2 to a substrate,
 - b) exposing the antibody to a sample containing protein under conditions to allow antibody:protein

complexes to form,

- c) dissociating the protein from the complex, and
- d) collecting the purified protein.

9. A method for using an antibody to detect expression of a protein in a sample, the method comprising:

- a) combining the antibody of claim 2 with a sample under conditions which allow the formation of antibody:protein complexes; and
- b) detecting complex formation, wherein complex formation indicates expression of the protein in the sample.

10. The method of claim 9 wherein complex formation is compared with standards and is diagnostic of a prostatic disorder.

11. The method of claim 9 wherein complex formation is compared with standards and is diagnostic of a gastrointestinal disorder.

12. A composition comprising an antibody of claim 2 and a labeling moiety.

13. A composition comprising an antibody of claim 2 and a pharmaceutical agent.

14. An array containing the antibody of claim 2.

15. A method for treating a prostatic disorder comprising administering to a subject in need of such treatment the antibody of claim 2.

16. A method for treating a gastrointestinal disorder comprising administering to a subject in need of such treatment the antibody of claim 2.

17. A method for testing a molecule or compound for effectiveness as an agonist, the method comprising:

- a) exposing a sample comprising a protein of claim 1 to a molecule or compound, and
- b) detecting agonist activity in the sample.

18. A purified agonist which modulates the activity of the protein of claim 1.

19. A method for testing a molecule or compound for effectiveness as an antagonist, the method comprising:

- a) exposing a sample comprising a protein of claim 1 to a molecule or compound, and
- b) detecting antagonist activity in the sample.

20. A purified antagonist which modulates the activity of the protein of claim 1.